

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2004/003227

International filing date (day/month/year)
04.10.2004

Priority date (day/month/year)
07.10.2003

International Patent Classification (IPC) or both national classification and IPC
C08G77/26, D06M15/267

Applicant
CLARIANT INTERNATIONAL LTD

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

10/575154

International application No.
PCT/IB2004/003227

~~AD 2004 PCT/IB 06 APR 2006~~

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/003227

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-7
	No: Claims	
Inventive step (IS)	Yes: Claims	1-7
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-7
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2004/003227

Section V:

**Reasoned statement with regard to novelty, inventive step and industrial
applicability Article 33 (2) to (4) PCT:**

D1: EP 0 415 698 A

1. The present invention relates to
Amino-functional silicone waxes of formulae (I) to (IV) being reaction products of
silicone oils with fatty acid diamides as defined in present claims 1-2.
It further relates to a process for preparing said amino-functional silicone waxes by
condensation of fatty acids with diethylenetriamine or dipropylenediamine and
then reacting with silicone oils of the general formulae (V) or (VI) as defined in
present claims 3-5 and further
to the use of said silicone waxes as textile softeners as defined in present claims 6
and 7.
2. The present application meets the requirements of Article 33 (2) PCT because the
subject-matter of claims 1-7 is novel.
None of the documents of the prior art discloses amino-functional silicone waxes
of formulae (I) to (IV), a process for preparing them or their use with the features
defined in present claims 1-7.
The subject-matter of claims 1-7 is therefore novel.
3. The present application meets also the requirements of Article 33 (3) PCT
because the subject-matter of claims 1-7 is inventive.

D1 is considered to represent the closest prior art since it discloses fabric softener
compositions having a structure of lamellar droplets dispersed in the aqueous
phase comprising a cationic fabric softening material comprising among others
alkylammonium compounds derived from fatty acids and reaction products of fatty
acids with a polyamine.

D1 does not disclose compounds having a silicone backbone. however.

The problem underlying the present application may be regarded as to provide
further textile softeners comprising a cationic fabric softening material.

No indication is given in the prior art that the specific amino-functional silicone waxes of formulae (I) to (IV) being reaction products of silicone oils with fatty acid diamides as defined in the present claims can be used to solve this problem.

None of the documents of the search report discloses or suggests such a amino-functional silicone waxes or a process for their preparation or gives an indication in that direction.

Therefore the presence of an inventive step can be acknowledged for the subject-matter of claims 1-7 vis- à- vis the documents of the search report.

4. The present application meets the requirements of Article 33 (4) PCT because the subject-matter of claims 1-7 is also industrially applicable.